GETINGE Castle

98–01
SUPPLEMENT
Rev. B 01/19/2000

SETTING THE TIMER (Wiring Detail Included) Castle® Model 2415–UW Ultrasonic Cleaner and Model 2415–RD Rinser-Dryer

EFFECTIVE IMMEDIATELY — APPLIES TO:
OPERATOR MANUALS 350490, 350491
SERVICE MANUALS 350593, 350601

Summary

These instructions tell how to set and operate the timer(s) (P/N 61301602222).

The timer can be programmed to operate in one of five operating modes. However, the recommended operating mode has already been set at the factory. Five selectable time ranges and a programmable decimal point provide preset times ranging from .01 seconds to 9999 hours.

All programming is done using the front panel. The LCD (Liquid Crystal Display) shows elapsed or remaining cycle time as well as the preset timing value.

FOR SERVICE REFERENCE: Notes on replacing the timer and details from the wiring diagrams are also included (see "Replacing the Timer" on page 5 and "Wiring Detail" on page 6).

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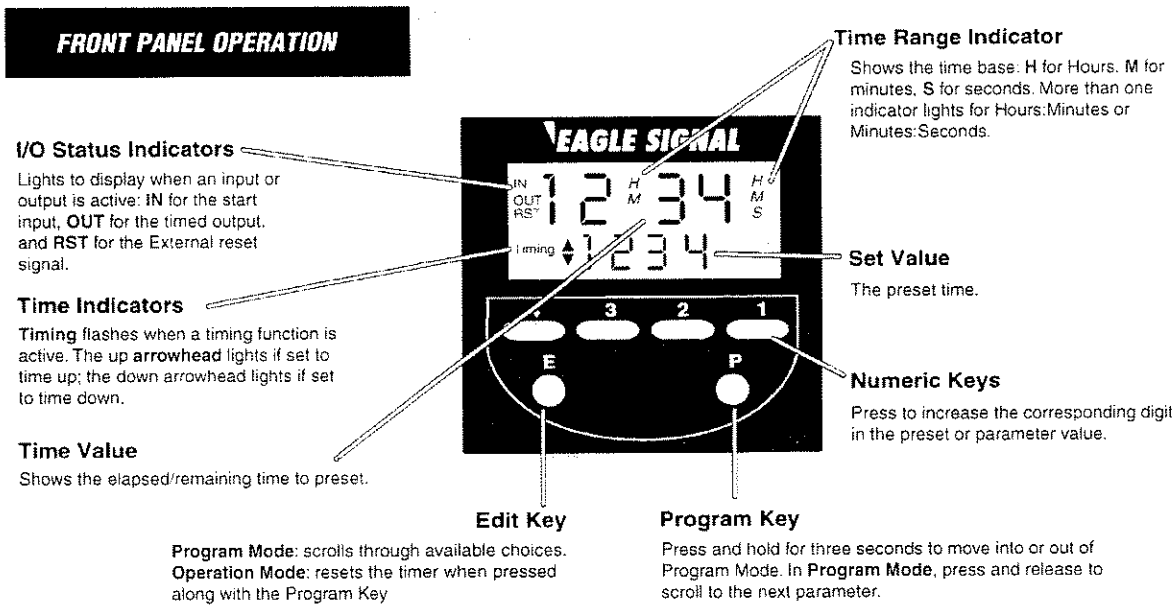
SETTING THE TIMER WITH WIRING DETAIL—2415–UW, 2415–RD

Front Panel

Figure 1. Front Panel


FRONT PANEL OPERATION
Time Range Indicator
Shows the time base: H for Hours. M for minutes, S for seconds. More than one indicator lights for Hours:Minutes or Minutes:Seconds.
I/O Status Indicators
Lights to display when an input or output is active: IN for the start input, OUT for the timed output, and RST for the External reset signal.
EAGLE SIGNAL
IN
OUT
RST
H
M
H
M
S
Timing
Set Value
The preset time.
Time Indicators
Timing flashes when a timing function is active. The up arrowhead lights if set to time up; the down arrowhead lights if set to time down.
3
2
1
E
P
Numeric Keys
Press to increase the corresponding digit in the preset or parameter value.
Time Value
Shows the elapsed/remaining time to preset.
Edit Key
Program Mode: scrolls through available choices. Operation Mode: resets the timer when pressed along with the Program Key
Program Key
Press and hold for three seconds to move into or out of Program Mode. In Program Mode, press and release to scroll to the next parameter.

Setting The Timer

SETTING THE RUN TIME

Each numeric key sets one of the digits in the display:

- To increase a digit by one, press the corresponding numeric key.
- To scroll a digit quickly, press and hold the corresponding numeric key.

To set the run time, press the numeric keys until the desired setpoint appears in the Set Value display.

Recommended Setpoints

2415–UW		2415–RD	
Degas	4–5 min.	Rinse	3–4 min.
Wash	3–5 min.	Dry	10–14 min.

PROGRAM MODE

NOTE

The timer normally operates in Operation Mode. Timers are programmed at the factory. Use Program Mode only if your application requires specific changes to the standard programming.

SETTING THE TIMER WITH WIRING DETAIL—2415–UW, 2415–RD

Use Program Mode to set the timer for operating function, time range, timing direction, power reset enable, front panel reset enable, and security level. Tables for each function show the choices given in the bottom display, and the default choice as programmed at the factory.

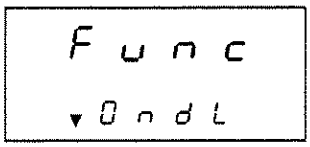
- **To enter Program Mode:** Press and hold P (program key) for 3 seconds.
- **To exit Program Mode at any time and return to Operation Mode:** Press and hold P (program key) for 3 seconds.

While in Program Mode:

- Press P to advance the *top parameter.*
- Press E to advance the *bottom display* for each parameter.

SET THE OPERATING FUNCTION

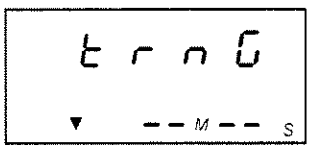
Determines how outputs will operate in relation to the set value.



Bottom Display	Default
(OndL) On-Delay	<
(OFdL) Off Delay	
(int) Interval	
(CYCL) Repeat Cycle	
(dint) Delay/Interval	

SET THE TIME RANGE

Sets the unit of measure for the time values that will show in Operation Mode.



Bottom Display	Default
Seconds	
Minutes	
Hours	
Minutes:Seconds	<
Hours:Minutes	

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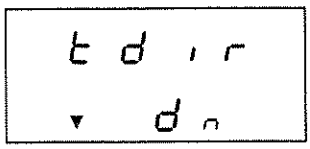
SET THE TIMING DIRECTION

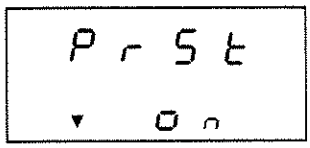
Determines whether the time value will increment from zero and change the state of the output at the set value (uP) or decrement from the set value and change the state of the output at zero (dn).



Bottom Display	Default
(uP) Count up from zero	
(dn) Count down to zero	<

SET THE POWER RESET ENABLE

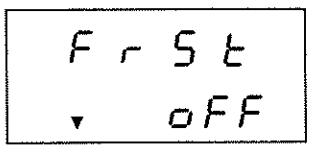
After a loss of power the unit can either reset upon reapplication of power (On) or continue from the point of power interruption (Off).



Bottom Display	Default
(On) Reset when power is restored	<
(oFF) Continue from point of interruption	

SET THE FRONTPANEL RESET ENABLE

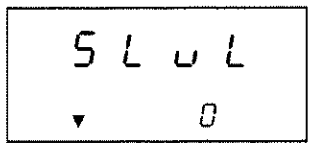
Reset in Operation Mode by pressing both P and E (On), or reset only through the remote input (Off).



Bottom Display	Default
(On) Reset in Operation Mode	
(oFF) Reset only through Remote Input	<

SET THE SECURITY LEVEL

Four levels of security are available.



Bottom Display	Default
(0) Full access	<
(1) Setpoint locked out	
(2) Access to Program Mode only by pressing and holding P for 10 seconds	
(3) Setpoint locked out AND access to Program Mode only by pressing and holding P for 10 seconds	

Replacing the Timer

REPLACEMENT NOTES

When replacing the timer:

- (*2415-UW only*) The tank must be full of water.
- The unit must be in cycle to program the timer.

INCREASING THE DEFAULT TIME

The replacement timer is programmed with a default value of 1 second. Since the unit must be in cycle to program the timer, this value does not provide enough time.

To increase the value of the timer:

1. Press POWER.
2. Press and hold numeric key 2.
3. While holding numeric key 2, press LID.
   - The lid begins to close.
   - When the lid closes, the timer activates for 1 second.
   - Because key 2 is held, the timer adds ten seconds to its setting for the next cycle.
   - The lid opens.
4. Press LID again.
   - This cycle is now set for 11 seconds.
   - Program the timer as required.
   - If this is still not enough time, press key 2 again to increase the time for the next cycle.

SETTING THE TIMER WITH WIRING DETAIL—2415–UW, 2415–RD

Wiring Detail

Figure 2. WIRING DETAIL—2415UW

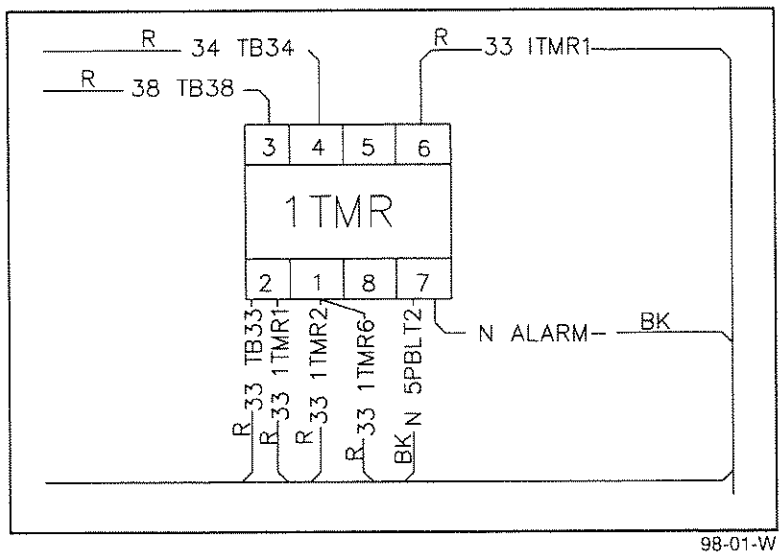


Figure 3. WIRING DETAIL—2415RD